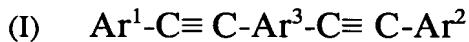


REMARKS

Reconsideration of the application identified in caption, pursuant to and consistent with 37 C.F.R. §1.111 and in light of the remarks which follow, is respectfully requested.

In the Official Action, claims 1-21 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,751,388 (*Larson*) in view of U.S. Patent No. 6,149,837 (*Sekine et al.*). Claims 22 and 23 stand rejected under 35 U.S.C. §103(a) as being obvious over *Larson* in view of *Sekine et al.*, and further in view of U.S. Patent No. 5,672,296 (*Shen et al.*). Withdrawal of these rejections is respectfully requested for at least the following reasons.

Claim 1 is directed to an optical film comprising a transparent support and a linearly polarizing layer which selectively transmits polarized light and which selectively reflects or scatters other polarized light, wherein the linearly polarizing layer contains a liquid crystal compound represented by the following formula (I), wherein the compound has a fixed alignment:



in which each of Ar^1 and Ar^2 independently is a monovalent aromatic group, and Ar^3 is a divalent aromatic group.

Larson relates to the field of polarized displays (col. 1, line 4). *Larson* discloses a polarization sensitive scattering element (PSSE) having a uniaxial homogeneously-aligned polymer dispersed liquid crystal (PDLC) structure (col. 6, lines 22 and 23).

Larson does not disclose or suggest each feature recited in claim 1. For example, *Larson* does not disclose or suggest a linearly polarizing layer containing a liquid crystal

compound represented by formula (I), as recited in claim 1. This deficiency of *Larson* is acknowledged by the Patent Office at page 3 of the Official Action.

The Patent Office has rejected the claims based on the alleged combination of *Sekine et al* and *Larson* (Official Action at page 3). In this regard, it is well established that in order for the Patent Office to properly combine references, there must be some suggestion or motivation to combine the reference teachings. M.P.E.P. §2142. The prior art must suggest the desirability of the claimed invention. Even if a claimed invention is within the capabilities of one of ordinary skill in the art, this is not sufficient by itself to establish *prima facie* obviousness. M.P.E.P. §2143.01.

In the present case, the Patent Office has relied on *Sekine et al* for disclosing a phenylacetylene compound represented by the general formula (1) (col. 3, lines 9-55). However, *Sekine et al* has no disclosure or suggestion of the use of the general formula (1) compound thereof in a polarization sensitive scattering element (PSSE) as disclosed by *Larson*. In fact, *Sekine et al* does not provide any mention or suggestion of the use of the general formula (1) compound in a polarizing element. As such, it is apparent that one of ordinary skill in the art would not have been motivated to combine *Larson* with *Sekine et al* in the manner suggested by the Patent Office.

It is further noted that *Larson* discloses that U.S. Patent No. 4,685,771 describes a polymer dispersed liquid crystal (PDLC) structure for use in the *Larson* polarized display (col. 6, lines 1 and 2).¹ The liquid crystal disclosed by the '771 patent is completely different from the general formula (1) compound disclosed by *Sekine et al*. In view of this difference, it is further apparent that one of ordinary skill in the art would not have been

¹ An Information Disclosure Statement citing the '771 patent, and a copy of the '771 patent are concurrently filed herewith.

motivated to modify the PDLC of *Larson* by including therein the general formula (1) compound disclosed by *Sekine et al.*

The Patent Office has asserted that because *Sekine et al* discloses that the general formula (1) compound has a large anisotropy of refractive index and is more advantageous in stability to light, this suggests the use of such compound in the polarization sensitive scattering element (PSSE) disclosed by *Larson* (Official Action at pages 5 and 6). Applicants respectfully but strenuously disagree with this assertion. Simply put, the mere disclosure of a large anisotropy of refractive index does not fairly suggest the use of the general formula (1) compound disclosed by *Sekine et al* in the PSSE disclosed by *Larson*. Applicants submit that while *Sekine et al*'s disclosure concerning the large anisotropy of refractive index may at best suggest that the general formula (1) compound is suitable for use as a liquid crystal, this does not fairly suggest the use of such compound in the PSSE of *Larson*. Furthermore, the disclosure that the general formula (1) compound is more advantageous in stability to light does not provide any suggestion or motivation for using such compound in the PSSE disclosed by *Larson*.

In view of the above, it is apparent that absent an improper resort to Applicants' own disclosure, one of ordinary skill in the art would not have been motivated to combine *Larson* and *Sekine et al* in the manner suggested in the Official Action.

Shen et al relates to a polarizing film which possesses a polarizing efficiency of at least 70%, and comprises a blend of (a) a film-forming, wholly aromatic thermotropic liquid crystalline polymer and (b) a suitable dichroic dye (col. 2, lines 56-61).

Shen et al fails to cure the above-described deficiency of *Larson*. In this regard, the Patent Office has relied on *Shen et al* for disclosing the use of boric acid as a crosslinking

agent (Official Action at page 11). However, like *Larson, Shen et al* does not disclose or suggest the liquid crystal compound represented by formula (I) recited in claim 1.

Independent claims 17 and 19 are directed to a polarizing plate and a liquid crystal display, respectively. Like claim 1, each of claims 17 and 19 recites a compound represented by the formula (I):



in which each of Ar^1 and Ar^2 independently is a monovalent aromatic group, and Ar^3 is a divalent aromatic group. As such, it is respectfully submitted that claims 17 and 19 are allowable over the applied art for at least the same reasons discussed above with respect to claim 1.

For at least the above reasons, it is apparent that no *prima facie* case of obviousness has been established. Accordingly, withdrawal of the §103(a) rejections is respectfully requested.

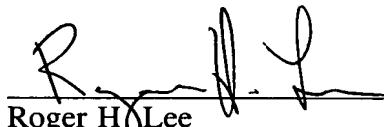
From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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